Project Descriptions for May 8, 2019

Board of Trustees Meeting

Clean Water Commitments

Haverhill CW-17-14

The major components of the project include: improvements to the WWTF's secondary treatment system (aeration blowers and sludge pumps/piping, as well as appurtenant electrical upgrades) which will improve the ability to meet the NPDES permit limits; upgrades to the Citywide Supervisory Control and Data Acquisition (SCADA) system, including WWTF and pump stations; upgrades at two significant pump stations to address repeated mechanical issues; and an odor control biofilter to mitigate impacts on abutting residents.

Holyoke CW-19-04

The project consists of the separation of combined sewers in the Jackson St. area to eliminate 23 million gallons of combined flow that currently discharges to the Connecticut River annually from the Jackson St. area outfall. The work includes the construction of 14,400 ft. of new sewers and drains, and 3,200 ft. of sewer lining. Elimination of the Jackson St. combined sewer outfall will result in a significant improvement in water quality within the Connecticut River in this area of the City. The project is consistent with the City's CSO Long-Term Control Plan and is being required by an Administrative Order issued by the U.S. EPA and a draft Consent Decree issued by the U.S. Department of Justice.

New Bedford CW-17-10

The City of New Bedford's collection system is over 100 years old. Many of its critical components are showing signs of their age. This project will develop the required planning documents and complete field investigations necessary to begin implementing future system rehabilitation efforts, address regulatory requirement needs, eliminate illicit connection, and reduce CSOs

Tyngsborough CW-19-03

This CY19 PEF builds on the metering study being completed as part of Phase 1 I/I (CWSRF No. 4390), which is due to be finalized fall 2018. The CY19 PEF contains the next steps of flow isolation, CCTV, manhole inspection, smoke testing and building inspections and will allow the Town to move seamlessly into the final planning steps. All data received as a result will be compiled in a Data Analysis Report, which finalizes the I/I studies and contain recommendations for implementation.

Clean Water Agreements

Easton CW-18-25

The Five Corners Sewer Project will provide sewer to the Five Corners Needs Area in Easton, MA. This Needs Area was determined to be a high-priority area during the CWMP process completed in 2014. The Needs Area stretches between the intersection of Foundry St & Robert Dr to the intersections of Foundry St, Depot St, & Bay Rd. This area includes ponds, wetlands, and 2 historical districts, which are being threatened by failing septic systems. The Project will consist of approximately 11,100 linear feet (LF) of gravity sewer, 2,700 LF of forcemain & 850 LF of low pressure sewer. Additionally, the project will require the construction of 1 pump station on a town-owned parcel. Flows will be conveyed to the Mansfield WPCF for treatment.

Fall River CWP-18-35

The proposed project involves conveyance improvements and capacity increase to the existing drainage infrastructure. The objective of this project is to mitigate flooding on Hyacinth Street, reduce inflow to the President Avenue Sewer System, improve the water quality of storm water discharge through the use of BMPs, and protect the Watuppa Ponds (Fall River's water supply).

Haverhill CW-17-14

The major components of the project include: improvements to the WWTF's secondary treatment system (aeration blowers and sludge pumps/piping, as well as appurtenant electrical upgrades) which will improve the ability to meet the NPDES permit limits; upgrades to the Citywide Supervisory Control and Data Acquisition (SCADA) system, including WWTF and pump stations; upgrades at two significant pump stations to address repeated mechanical issues; and an odor control biofilter to mitigate impacts on abutting residents.

Hull CW-18-20

Hull's WWTF was built in the late 70's, with partial upgrade in 02. Due to age and location (subjects the plant to coastal flooding), a Facility Plan and Resiliency Update is needed. The '16 Coastal Climate Change Vulnerability Assessment & Adaptation Study, noted the WWTF with the highest consequence of failure score, signifying immediate long-term capital planning needs. Hull is completing a CMOM under AOC and a Fiscal Sustainability Plan, both of which recommend planning updates for capital repairs and improvements to the collection system, pump stations and treatment plant processes, as well as energy & conservation measures. The Town also recently evaluated connecting to MWRA. The Study will identify options and detail solutions.

Hull CW-18-21

RCM provides for improved reliability, resiliency, sustainability & overall improved asset management. It provides a comprehensive, structured & analytical development of cost effective solutions to provide:

- -Risk avoidance or reduction
- -Safety and environmental hazards reduction
- -Reduced capital & optimized O&M cost
- -Maximize \$ over life cycle
- -Redundant systems based on risk profile
- -Maintenance strategy for protective devices & safety systems
- -Cost savings & lower insurance costs
- -Maintainability oriented Design
- -RCD provides Reliability-Centered Maintenance Strategies before start-up
- -Failure mode records
- -Baseline for improvement
- -Integrated Team Work
- -Improved spare-part inventory planning
- -Standardization of design & O&M practices

Lawrence CW-14-16-A

Wastewater from the City of Lawrence is part of the GLSD system which discharges into the Merrimack River. The current NPDES permit became effective in 2005 and required all members of GLSD to develop Infiltration/ Inflow (I/I) Control Programs to find, document and eliminate I/I sources within their respective systems. The City of Lawrence completed several of the required tasks and over the past year began portions of the Phase I and II Sewer System Evaluation Survey (SSES) and Capacity, Management, Operations and Maintenance (CMOM) work. The current project, sewer system rehabilitation and high priority pipe replacement, includes cast-in-place-pipe lining (CIPP) and replacement of sewer main in areas across the City.

Lawrence CWP-18-09

This project will rehabilitate and replace sewer system defects, and operational and maintenance issues, identified in the SSES report. The sewer and drainage system improvements will address structural pipe failures, reduce infiltration and inflow sources, and abate illicit cross connectors to the MS4 areas.

New Bedford CW-17-10

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Tyngsborough CW-19-03

This CY19 PEF builds on the metering study being completed as part of Phase 1 I/I (CWSRF No. 4390), which is due to be finalized fall 2018. The CY19 PEF contains the next steps of flow isolation, CCTV, manhole inspection, smoke testing and building inspections and will allow the Town to move seamlessly into the final planning steps. All data received as a result will be compiled in a Data Analysis Report, which finalizes the I/I studies and contain recommendations for implementation.

Lawrence Emergency Clean Water Agreement

Lawrence CWP-18-09-A

This project will rehabilitate and replace sewer system defects, and operational and maintenance issues, identified in the SSES report. The sewer and drainage system improvements will address structural pipe failures, reduce infiltration and inflow sources, and abate illicit cross connectors to the MS4 areas.